

## EAST Search History

| Ref # | Hits | Search Query  | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|------|---|--|------------------|---------|------------------|
| L1    | 982  | 455/208,209,147,3315,318.ccls.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/05/01 12:04 |
| L2    | 139  | 1 and (divid\$4 same (mix\$4 or (frequency near conver\$4)) same (filt\$4 or remov\$4)) | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/05/01 12:05 |
| S1    | 666  | 455/214,215.ccls.   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/11 13:52 |
| S2    | 306  | S1 and (filt\$4 or remov\$4)  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/11 19:11 |
| S3    | 175  | S2 and (mix\$4 or (frequency near conver\$4))   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/11 19:11 |

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|    |        |   |  |    |    |                  |
|----|--------|---|--|----|----|------------------|
| S4 | 42     | ("20050048932"   "5187809"  <br>"5471652"   "5564076"  <br>"5590408"   "5715526"  <br>"5722053"   "5757858"  <br>"5794159"   "5896562"  <br>"5974305"   "6014551"  <br>"6028850"   "6031878"  <br>"6069925"   "6125266"  <br>"6148048"   "6178313"  <br>"6185434"   "6215988"  <br>"6243569"   "6349216"  <br>"6377813"   "6392479"  <br>"6405025"   "6430421"  <br>"6438360"   "6459253"  <br>"6463293"   "6469995"  <br>"6498785"   "6516206"  <br>"6535748"   "6545547"  <br>"6556635"   "6643522"  <br>"6708025"   "6708044"  <br>"6735426"   "6766178"  <br>"6868263"   "6980610").PN. OR<br>("7106805").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                                     | OR | ON | 2007/04/11 14:43 |
| S5 | 214781 | synthes\$6 and divid\$4   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 16:30 |
| S6 | 12     | S3 and S5   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 17:04 |
| S7 | 23     | ((regenerat\$4 or (re adj<br>generat\$4)) near2 divid\$4) same<br>(synthes\$6)  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 17:14 |
| S8 | 79     | ((regenerat\$4 or (re adj<br>generat\$4)) adj2 divid\$4) and<br>(synthes\$6)  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 19:09 |

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|     |       |  |  |    |    |                  |
|-----|-------|--|--|----|----|------------------|
| S9  | 63    | S8 not S7  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 17:25 |
| S10 | 2     | "6785528".pn.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 17:25 |
| S12 | 10749 | ((regenerat\$4 or (re adj<br>generat\$4) or frequency) adj<br>divid\$4) and (synthes\$6)   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 19:14 |
| S13 | 1590  | S12 and ((phase same quadra\$5)<br>or (I adj Q))   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 19:11 |
| S14 | 1357  | S13 and (mix\$4 or (frequency<br>near conver\$4))  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 19:11 |
| S15 | 1340  | S14 and (filt\$4 or remov\$4)  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 19:11 |
| S16 | 572   | S15 and (divid\$4 same (mix\$4 or<br>(frequency near conver\$4)) same<br>(filt\$4 or remov\$4))  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/05/01 12:04 |
| S18 | 1     | ("2002/0022465").URPN.   | USPAT  | OR | ON | 2007/04/11 19:22 |
| S19 | 9     | ("5179360"   "5771442"  <br>"5812605"   "5844868"  <br>"6175746"   "6269253"  <br>"6484013"   "6609010"  <br>"6735426").PN. OR ("7058380").<br>URPN. | US-PGPUB;<br>USPAT;<br>USOCR                                     | OR | ON | 2007/04/11 19:22 |

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|     |       |  |  |    |    |                  |
|-----|-------|--|--|----|----|------------------|
| S21 | 568   | S16 and oscillat\$4  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 19:45 |
| S22 | 551   | S21 not S8   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 19:46 |
| S23 | 551   | S22 not S7   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/11 19:50 |
| S24 | 434   | S23 and ((@ad   @pt1d   @frpd  <br>@read   @rlad   @ptad) <<br>"20030108" )              | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:02 |
| S25 | 23    | ((regenerat\$4 or (re adj<br>generat\$4)) near2 divid\$4) same<br>(synthes\$6)           | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:28 |
| S26 | 79    | ((regenerat\$4 or (re adj<br>generat\$4)) adj2 divid\$4) and<br>(synthes\$6)             | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:02 |
| S27 | 10757 | ((regenerat\$4 or (re adj<br>generat\$4) or frequency) adj<br>divid\$4) and (synthes\$6) | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:41 |
| S28 | 1591  | S27 and ((phase same quadra\$5)<br>or (I adj Q))   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:29 |

## EAST Search History

|     |      |   |  |    |    |                  |
|-----|------|---|--|----|----|------------------|
| S29 | 1358 | S28 and (mix\$4 or (frequency near conver\$4))  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:40 |
| S30 | 1341 | S29 and (filt\$4 or remov\$4)   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:40 |
| S31 | 572  | S30 and (divid\$4 same (mix\$4 or (frequency near conver\$4)) same (filt\$4 or remov\$4)) | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:40 |
| S32 | 568  | S31 and oscillat\$4   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:02 |
| S33 | 551  | S32 not S26   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:02 |
| S34 | 551  | S33 not S25   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:02 |
| S35 | 434  | S34 and ((@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20030108" )                     | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:41 |
| S36 | 223  | S35 and "455"/\$.ccls.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:23 |

## EAST Search History

|     |      |  |  |    |    |                  |
|-----|------|--|--|----|----|------------------|
| S37 | 98   | S36 and 455/76,165.1,331,183.1, 260,563.ccls.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:23 |
| S38 | 284  | S34 and "455"/\$.ccls.   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:23 |
| S39 | 111  | S38 and 455/76,165.1,331,183.1, 260,563.ccls.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 11:39 |
| S40 | 32   | ("4211975"   "4340975"  <br>"4408347"   "4789976"  <br>"4818903"   "4903329"  <br>"5028887"   "5031233"  <br>"5200826"   "5311318"  <br>"5423076"   "5428829"  <br>"5630214"   "5715012"  <br>"5737035"   "5828589"  <br>"5956098"   "5982823"  <br>"6163684"   "6177964"  <br>"6195563").PN. OR ("6591091").<br>URPN. | US-PGPUB;<br>USPAT;<br>USOCR                                     | OR | ON | 2007/04/12 12:09 |
| S41 | 220  | ((regenerat\$4 or (re adj<br>generat\$4)) near2 divid\$4) and<br>(synthes\$6)  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:28 |
| S42 | 33   | S41 and ((phase same quadra\$5)<br>or (I with Q) or (sin same cos))  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:40 |
| S43 | 1507 | 455/205,207,209,213,214,215,<br>216.ccls.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:39 |

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|     |       |  |  |    |    |                  |
|-----|-------|--|--|----|----|------------------|
| S44 | 347   | S43 and ((phase same quadra\$5) or (I with Q) or (sin same cos))                                 | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/05/01 11:02 |
| S45 | 269   | S44 and (mix\$4 or (frequency near conver\$4))   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:40 |
| S46 | 260   | S45 and (filt\$4 or remov\$4)  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:40 |
| S47 | 11236 | ((regenerat\$4 or (re adj generat\$4) or frequency or program\$4) adj divid\$4) and (synthes\$6) | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:41 |
| S48 | 29    | S46 and S47  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:41 |
| S49 | 27    | S48 and ((@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20030108" )                            | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/12 12:42 |
| S50 | 1     | ("2002/0022465").URPN.   | USPAT  | OR | ON | 2007/04/12 13:31 |
| S51 | / 1   | "6091780".pn.  | USPAT  | OR | ON | 2007/04/12 13:31 |
| S52 | 2     | "20060246861".pn.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/28 14:49 |
| S53 | 1     | ("2002/0022465").URPN.   | USPAT  | OR | ON | 2007/04/28 15:53 |

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|     |     |   |  |    |    |                  |
|-----|-----|---|--|----|----|------------------|
| S54 | 14  | ("5278994" "5936546" "6151354"<br> "6154641" "6230026" "6366622"<br> "6377562" "6385203" "6404293"<br> "6415001" "6429812" "6441701"<br> "6658748" "6678503").PN. | USPAT  | OR | ON | 2007/04/28 15:57 |
| S55 | 907 | 331/40,43,77,22,30.ccls.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/05/01 10:58 |
| S56 | 191 | S55 and (mix\$4 or (frequency adj<br>conver\$5))  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/05/01 10:59 |
| S57 | 168 | S56 and (filt\$4 or remov\$4)   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/05/01 10:59 |
| S58 | 120 | S57 and (divid\$4)  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/05/01 11:00 |
| S59 | 56  | (DOSANJH near2 SATHWANT).in.<br>(KUNG near2 WILLIAM).in.<br>(MANKU near2 TAJINDER).in.  | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/05/01 11:40 |
| S60 | 20  | S59 and divid\$5 and (mix\$4 or<br>(frequency adj conver\$5))   | US-PGPUB;<br>USPAT;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/05/01 11:41 |